

- xv. "Archiv für Anthropologie." Vieweg u. Sohn Braunschweig. Band 17 1887.
- xvi. W. W. Hunter. "Imperial Gazetteer of India." 1886. Vol. V. Article "Gilgit."
- xvii. Dr. G. Capus. "Revue Scientifique." III^e Série. Tome XVII. Jan. to July, 1889. p. 7.
- xviii. Dr. Hyde Clarke. "Indian Antiquary," 1872. August 2nd.
- xix. Col. Biddulph. "Journal of the Royal Asiatic Society." Vol. XVII. New Series. 1885.
- xx. M. de Ujfalvy. "Bulletin de la Société Anthropologique de Paris." Séance du 16 Mars, 1882. p. 226.
- xxi. Prof. E. E. Oliver. "Pathan and Biloch." 1890. pp. 320-327.
- xxii. E. F. Knight. "Where three Empires meet." 1893. (Longmans).
- xxiii. Emile Deschamps. "Les Veddas de Ceylan." L'Anthropologie. 1891.
- xxiv. Paul and Fritz Sarasin. "Ergebnisse Naturwissenschaftlicher forschungen auf Ceylon." 1893.
- xxv. Dr. P. Topinard. "Eléments d'Anthropologie Générale." 1885. p. 711.
- xxvi. Biddulph. "Races of the Hindu-Kush."

DISCUSSION.

Dr. GARSON remarked that the specimen of the male cranium agreed very closely in its characters with a series of five crania described by him in the Journal of the Institute in 1888, from the same district. One of the most noticeable characters of the skull is the great development of the supra-orbital region, which forms, as it were, a prominent bar across the forehead. About four years ago he had an opportunity of seeing some photographs of the people, exhibited at the Institute by Dr. Leitner, of Woking, which showed that this feature is equally characteristic of the living subject. He handed round a photograph which had been presented him by Dr. Leitner, of a group of natives of different tribes from the place where the skulls were obtained. Specimens from this region of Asia are very difficult to obtain, and consequently their affinities to neighbouring nations are little known. From his examination of the specimens he had described he had come to the same conclusion as Mr. Duckworth, viz., that there was certainly no trace of Mongolian affinities in them. The average cranial capacity of four of his specimens was exactly the same as that stated by Mr. Duckworth to be the capacity of the male cranium. The female cranium on the table was the first one of that sex he had seen.

DAMMA ISLAND *and its* NATIVES. By P. W. BASSETT-SMITH, Surgeon R.N.

[WITH PLATES VIII, IX.]

In November, 1891, while serving on board H.M. surveying ship "Penguin," it was my good fortune to visit Damma Island, one of the largest of the Serwati group in the Banda Sea, in latitude 7° 08' S., longitude 128° 40' E.

It is almost half way between Timor and Tenimber Island (Timor Laut), and is also almost intermediate between Port Darwin and Amboyna, being thus passed en route from the former place to Hong Kong. An occasional trading steamer calls at this island, as at Tenimber, and it is nominally ruled by the Dutch; the only official representative, however, was a "Postholder," an ancient Macassar man, who came off to the ship wearing a black coat and fez, carrying a gold-headed stick, bearing on it the Netherlands arms; but he was very poor, and eagerly accepted biscuit, or anything else that was offered to him; with him were his family and a few other Malays, who all lived together, and from them I gathered that there was very little fever in the island, and not much game. These younger Malays occasionally acted as guides, yet I believe the island is practically unknown to Europeans, and the racial character of the inhabitants doubtful. The only mention I have been able to find of them being in Stanford's Compendium, "Australasia," where Mr. Wallace states that they are like those of Wetter Island (which is a little further west), who again are like those of Timor, and therefore probably belong to the sub-Papuan type; this being so, our visit was particularly interesting, and as many facts and observations, as well as Natural History and other specimens, were collected during our short stay of five and a half days as possible. But one cannot too strongly bear in mind Mr. Wallace's caution as to the drawing inferences, or speaking dogmatically of the exact nature of the races of these islands, without long residence among them, and especially without some knowledge of the languages. These people, however, certainly present many marked peculiarities and interesting points, which might be expected from their geographical position between the great Malayan Islands and New Guinea, ethnologically so distinct.

The island is of an irregular horse-shoe shape, about eight miles in diameter, irregularly and highly mountainous, having a lofty truncated peak at the northern end, which is constantly smoking, and on its eastern side the upper third shows bare and stratified layers of lava, with here and there large patches of sulphur; below which is dense forest, which also, as far as I saw, seemed to cover the whole island, resembling much the Molucca Islands in the profuse vegetation.

On the east side is a natural harbour, "Koelewette," where the ship anchored, deep water being obtained close up to the shore, with a muddy bottom; the margin being fringed with coral reefs going steeply down, from 6 fathoms. A very delicate *madrepora*, like *capillaris*, was obtained in quantities, together with many others in 2 to 4 fathoms. At the head

of the bay was an extensive mud-topped reef, on which were a few unhealthy corals, chiefly *goniastrea* and *tubipora*, the shore line being fringed with mangroves. The largest village on this side was situated here surrounded by a cocoanut plantation. In it there were about fifty houses or dwellings, enclosed by a dry-stone wall, having a wooden ladder for means of entrance and exit; a curious carved wooden figure raised high up on a post was found at the back.

By this village, which was called Solla, was a fine clear stream, and on either side of it were sago plantations, the water being used to wash the sago, in machines which were like those found in Ceram, and figured in "The Malay Archipelago"; these were numerous, and met with all over the island, the heaps of refuse, however, have a strongly offensive odour. Many bread-fruit, jack-fruit, mango, and cotton trees, bananas, and pineapples, with cocoanut, betel nut, ratan, and other palms were plentifully seen close by, the forest round was very dense with great numbers of acacias and *Ficus* spp., and very thick undergrowth, making travelling through it most difficult, and impossible without a native guide; near the mouth of the stream was a boat-building shed, and, from the amount of chips and *débris* round, they must do a good deal of work; some distance up nature was charming; the cool clear water ran quickly over its rough bed of boulders of hard basic lava rocks, in small rapids, the high and steep banks on either side being more or less covered by splendid ferns, and here and there a bright scarlet-coloured *hibiscus* flower showed, all overhung by great forest trees, bearing their burden of creepers and epiphytic plants, which shaded the hot glare of the tropical sun; in the clear air, numbers of small swifts sailing above, or a bright-coloured kingfisher darting by below, made a most delightful scene, and often near to, the deep "booing" of the great fruit pigeon, *Carpophaga concinna*, Wall., or a very closely-allied species; or a flight of lories, screaming loudly as they went by, would be heard.

In the pools were many large prawns, and I was much interested in seeing a bright-eyed native boy catching them; breaking off a small palm leaf, he made out of the mid-rib a couple of supple wands, each terminating in a noose. In one he placed a small piece of meat as a bait, with which the creature was lured from its hiding-place under the rocks, the second noose was then dexterously passed over its tail, and both quickly drawn out; I tried for a long time, but was never quite successful.

The first three days after our arrival, in company with Lieutenant Parry and a marine, I made an expedition round the side of the mountain to collect birds, etc., and if possible, to get

up to the top. The rock at the base was a trachytic lava, and in places where there were any streams and springs, they were found to be quite hot, too hot to bear one's hand in for a moment. Many were at the shore line, but some being between tide marks; in one, cuttlefish and birds were cooked sufficiently for the natives to eat. After marching nearly all day through forest, more or less dense, we came upon a village, about one-third of the way up the mountain, where we camped; it much resembled the one at the head of the bay, being walled all round, and having a plantation at the back, of cocoanut, betel nut, and bread-fruit trees. The huts were built of bamboo, *not on piles*, the walls covered in with laths, generally quite down to the ground, having a gable roof of thatch. Inside, each had a shelf, or floor at the level of the springing of the roof of split bamboo, on which they slept, there being no furniture of any sort. Over the doorway were carved grotesque figures of men and animals; the huts were arranged more or less regularly in rows, all being nearly equal in size; inside the compound were mango, jack-fruit and bread-fruit trees, with many bananas. We soon created friendly relations, and a system of barter for eggs, fruit, etc., but they did not value money much; clothes, especially bright-coloured ones, being most coveted, as well as needles, pins, knives, matches, etc. They gave us a new but roofless hut to use, in which was a carved wooden bowl on a pedestal, over which was stretched tightly a deer skin; this drum they beat at sunrise and sunset. Outside was another carved post and figure [Plate VIII] 7 feet high, which I afterwards sketched, but as they strongly objected to my doing so, I had to finish it when most of the men were away in the daytime. In the middle of the night it poured with rain, and we were agreeably surprised when our next door neighbour came out, and invited us into his house, where we slept on the shelf among his numerous naked children, heartily glad of the shelter.

During our stay at this village they treated us quite as friends, and though rather inquisitive, were never troublesome, coming in and crowding round when we dressed, ate, or did anything; but although we left our belongings at other times unprotected, they never touched or stole anything in our absence. They made us understand that it would take more time than we could spare to get up to the top of the volcano, so I had to be content with shooting, etc., what I could in the vicinity; the density of the forest growth, and the want of paths making this a matter of great difficulty; the weather, too, was oppressively hot in the thick jungle.

Natives.—As far as I was able to make out there were two more or less distinct types. The first with dark brown skins,

coarse black hair, either straight, or with a tendency to curl, sometimes closely cut, roundish faces and heads, dark eyes, high cheekbones, nose much sunken at the base, nostrils dilated, mouth rather large, and lips much misshapen by betel-chewing, the bolus of which they kept half protruding in a disgusting way ; body with but little hair, occasionally a short wiry beard and whiskers, height about 5 feet 6 inches, limbs well formed, ankles and wrists not particularly small, expression quiet and rather dull.

The second a coppery brown, much lighter race, with strong frizzly hair, either cut short, or standing out in a mop, coloured a rich orange yellow with lime, and evidently a great source of pride to them, face oval, eyes dark, sparkling, and full of life, nose aquiline, often slightly hooked at the tip, nostrils wide, mouth small, lips well cut, no hair on the face, at least, not when young adults, teeth good, expression bright and intelligent, limbs well shaped, rather delicate wrists and ankles, average height 5 feet 5 inches, or under ; some of these were so graceful and handsome as to fill anyone who observed them with admiration ; it was not a single individual, but numbers of them, and one instinctively made friends with their bright faces and ways. I was myself quite charmed. The former we found mostly in the coast villages, the latter on the hill side. In the former the low nose, straightish hair, thick lips, round heads, and high cheekbones, with general dulness of expression, point to Malayan origin, though the presence of curling in the hair, in some, and strong wiry beard, showed probable mixture of blood. In the second type the light colour, hairless faces and short stature are unusual in Papuans, yet the strong frizzly mop of hair, handsome faces, aquiline and slightly hooked nose, and general brightness of disposition very strongly favour that origin. Probably they are of a very mixed race, the inhabitants of Ceram and Bouru having spread south and intermingled with true Papuans from the east and Malays from the west.

The women were shorter in stature, with their hair done up in a knot at the back of the head : when young they were pleasant to look at, but apparently soon aged, and with their very pendent breasts were ugly : as a rule they did not leave the houses much while the men were in the compound or enclosure.

The average measurements of the hillmen I obtained were :

Height.	Length of head.	Width.	Cephalic Index.	Length of arm.	Length of leg.
5 ft. 5 ins.	7 $\frac{1}{8}$ ins.	6 $\frac{1}{8}$ ins.	82	32 ins.	35 ins.

Language.—The following words I collected from the hill or Papuan people :—

- | | |
|--------------------|------------------------------|
| 1. <i>Sarrah.</i> | 9. <i>Worsi.</i> |
| 2. <i>Wooruh.</i> | 10. <i>Woosarrah.</i> |
| 3. <i>Wortel.</i> | 11. <i>Woosarrah missa.</i> |
| 4. <i>Worwart.</i> | 12. <i>Woosarrah wooruh.</i> |
| 5. <i>Woolim.</i> | 20. <i>Woo worruh.</i> |
| 6. <i>Wornam.</i> | 30. <i>Woo wortel.</i> |
| 7. <i>Worit.</i> | 31. <i>Woo wortel missa.</i> |
| 8. <i>Wortu.</i> | 40. <i>Woo wor wart.</i> |

Man, *oomo* ; woman, *hatu* ; fire, *ai* ; water, *manu*.

I obtained these from one who also spoke Malay. The “*ai*,” for “fire,” might be an abbreviation of “*api*,” but the word for “wood” in the Ké Islands is “*ai*,” and with the N.W. Australians, wood and fire are both expressed by the same word, the numerals, however, bear a striking resemblance to those of the Timor Laut people.

Weapons.—Bows and arrows were their principal arms, every man being usually provided with them. The bows were made of bamboo, taken from a large stem, and nearly flat, the string being of twisted hide (deer), the arrows were about 5 feet 6 inches long, the shaft being of light bamboo, *not* feathered, the extremity of dark wood, very hard, 1 foot long, secured into the bamboo by fibre: these are more or less barbed. There were also some with iron heads, which are, I believe, only used when fighting amongst themselves; for shooting fish, at which they are most expert, they use long arrows with three points, each strongly barbed. They had some spears with wide flat iron heads, or all wood with the extremity barbed; for cutting cocoanut and jungle they have small parangs or knives, probably brought by Malay traders. These were the only weapons I saw.

Ornaments and Dress.—Through their orange-coloured bushy hair the men often wore combs most ingeniously made out of bamboo, and highly ornamented with carving, beads, tufts of hair, etc., and from their ears, the lobe of which was often much elongated, hung pendants of either silver, tortoiseshell, black wood, or fish bone; around their wrists they had wood or bone bracelets, more or less ornamented: these were much too small for any European adult, the wooden ones were of a curious shape, and studded with little brass nails (see Plate IX, Fig. 3). They did not pierce the nose or, I think, file the teeth, neither were any tattoo marks or scars seen on the body.

For dress, the men wore a simple T-shaped waist cloth, the women a short petticoat, and the children generally nothing.

Customs.—The men chiefly hunt and fish, or are employed boat-building, making sago, etc., and are away from the village all the day, when the women and numbers of children seem to

swarm out; besides their household duties the women and boys collect fruit from the forest and plantations, and bring in water which they carry in joints of large bamboos.

The beating of the drum at sunrise and sunset was no doubt a religious rite, as the chief man of the village did it each time, beginning gently, and working up to a loud pitch; in the evening several natives used to come and beat a few notes quietly; they were very careful to cover it up, and did not like us to put our things on it; the wooden "*gods*" were typically Papuan, and were held in fear. I also noticed outside the first-mentioned village an ordinary shed-like structure, under which was slung a small canoe, in which was seated the figure of a man: this was probably the grave of a chief.

One evening we persuaded the men to dance by moonlight inside the compound; two pairs accordingly began, linked arm in arm facing each other, advancing and retiring, singing and stamping: they were soon joined by others, until there were at least fourteen in two rows, their arms round the neck or waist of the next man. At first it was a slow measure, stamping and singing to a sort of chaunt, in perfect unison, but to a time which was most difficult for a European to pick up, this, after a time quickened, when they stamped up much dust; there being a sort of recitative, and two choruses ending by "*kāki*" and "*sāli*," which they uttered with the full force of their lungs, making the echoes ring again during the height of the dance. Most of the men and women turned out, and seemed very pleased when we applauded, they kept the dance going for two hours, but it became rather monotonous towards the end.

Their boats were generally "dug outs," with large outriggers, and had frequently a high and pointed bow and stern. Each also carried a forked stick amidships, like a mast, on which they suspended things, probably to keep them dry; the paddles were short, oval in shape, and with a cross-piece at the handle.

Salt was obtained by evaporating sea-water by the heat of the sun in shallow trays made of palm leaves.

The chief diseases I saw were ulcers of legs, mild cases of ophthalmia, one compound fracture of the arm which had been badly set, or not set at all, and a large number of men and boys more or less covered with the scaly ringworm of these eastern islands (*Tinea circinata tropica*). Pustular eruptions in the children were also very common. Thus it will be seen from the above that their mode of life and customs are decidedly Papuan, especially as regards their weapons, ornaments, houses, gods, and carvings; but bearing in many respects a strong resemblance to those of the people of Tenimber, as described by Mr. H. O. Forbes, in "*Naturalist's Wanderings in the Eastern Archipelago*;"

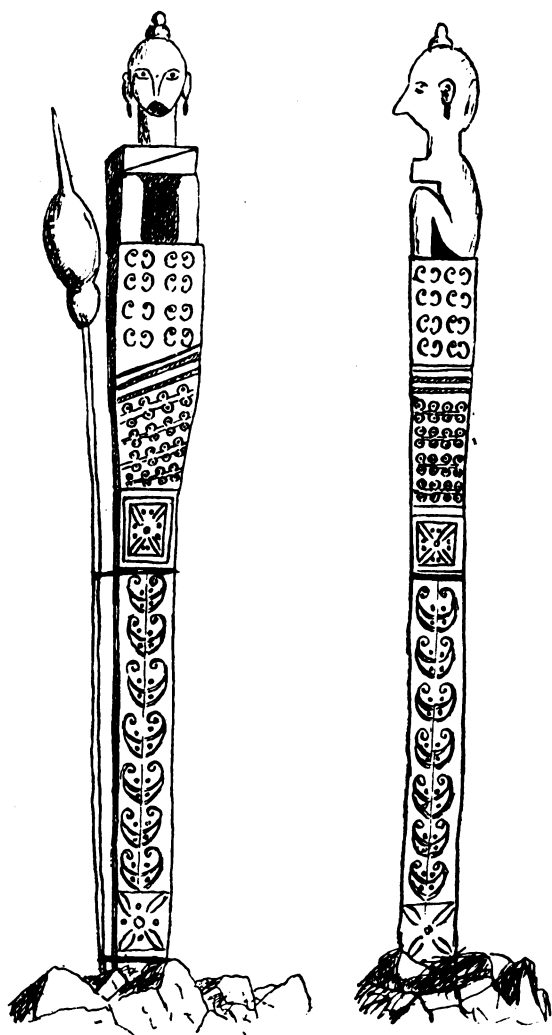
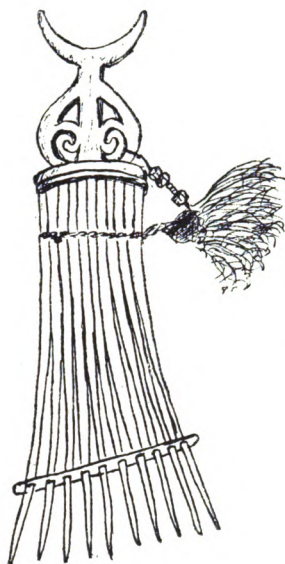


FIGURE OUTSIDE HILL VILLAGE.



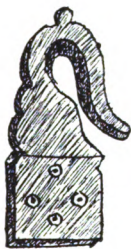
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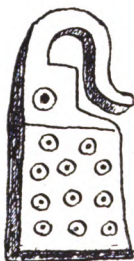
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4



5



6

1, 2.—BAMBOO COMBS.

3.—WOOD BRACELET.

4, 5, 6.—EAR PENDANTS.

thus physically and generally one may fairly consider that the majority belong to the "Melanesian," rather than the Malay, race.

The contrast to us of these pleasant-faced people, after the ugly natives of North West Australia, whom we had just left, and the Malays of Amboyna, shortly afterwards encountered, was striking.

The only quadruped obtained was a *cuscus*, but many large lizards were seen, and deer and pig are present. Eleven species of birds were collected, and many crustacea, etc. Mr. J. J. Walker, F.L.S., also obtained a valuable entomological collection.

On the TASMANIANS as Representatives of PALÆOLITHIC MAN.

By EDWARD B. TYLOR, Esq., D.C.L., F.R.S.

[WITH PLATES X, XI.]

[Read March 21st, 1893.]

IN the accounts of early visits to Tasmania, we have little more than mentions of the chief uses to which the natives put their stone implements. Tasman, on the first discovery in 1642, without seeing any of the people, judged that the notches for climbing the great trees were cut with flints. In 1772, Marion du Fresne saw natives armed with pointed staves, and with stones which appeared to have cutting edges like axe-heads. Furneaux supposed the spears to be sharpened with a shell or stone, and later, Widowson states that they harden one end, which is very sharply pointed, by burning and filing it with a flint prepared for the purpose.¹ These remarks, however, do not show how the native stone implements of Tasmania differed from those of Australia and Polynesia. About 1860 a Tasmanian stone implement was brought to England by Mr. Thomas Dawson, who presented it to the Museum of the Somerset Archaeological Society at Taunton. As appears from the cast exhibited (see Plate X, Fig. 1, *a, b, c*), it is formed from a flaked-off fragment, dressed by chipping to a rough surface before being struck off the block, and then finished by a series of blows struck round the inner surface so as to remove a succession of small chips

¹ Swart, "Journaal van de Reis naar het onbekende Zuidland door Abel Jansz. Tasman," Amst., 1860, p. 71 ("met vuersteenen gehouwen"). Crozet, "Nouveau Voyage," Paris, 1783, p. 28 ("armés . . . de quelques pierres qui nous parurent tranchantes, semblables à des fers de haches.") Furneaux in Cook, "Second Voyage," vol. i, p. 113. Widowson, "Present State of Van Diemen's Land," London, 1829, p. 190.